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MARCH 25, 1981

IRON AGE

THE MAGAZINE FOR METALWORKING MANAGEMENT

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MANUFACTURING SYSTEMS SERIES 38:

PROGRAMMABLE CONTROLLERS

MOVE INTO MOTION CONTROL

CAN HIGH SPEED RAIL TRANSPORT REVITALIZE INDUSTRIAL AMERICA?

SPECIAL ADVERTISING SECTION: THE NEW WORLD OF ROBOTIC ARC WELDING

EXCLUSIVE INTERVIEW: SENATOR JOHN HEINZ TALKS ABOUT IMPORT LEGISLATION

VOL. 226, NO. 9

IRON AGE

MARCH 25, 1983

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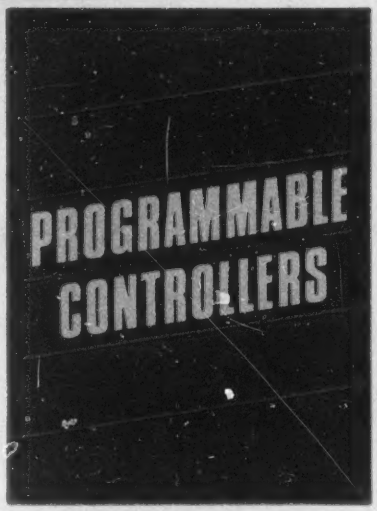

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EFFECTIVE MARCH 14, 1983

MATERIALS NEWSFRONT

Important Notice About Iron Age Scrap Prices

Beginning with the Jan. 21 issue Iron Age has been publishing only one set of scrap prices per issue—those with the effective date as close to the issue date as printing schedules permit. Prices for other weeks are available on a weekly basis through our Metal Price Phone Hotline or through our Weekly Price Newsletter.

Lake Superior Ore Prices

51.50% Fe Natural delivered lower Lake ports. Rail transportation, handling and unloading may be charged to the account of the buyer. Coarse ore 80¢ premium.

Pellets (per iron unit natural)..... gross-ton 80.50-86.9*
Old range, non-bessemer ..... gross-ton $32.78
Mesabi, regular-unscreened ..... gross-ton $32.53
Mesabi, non-bessemer.....gross-ton $32.25-32.53**

*80.50¢—Pickands Mather as of 1/27/81.
**86.9¢—U. S. Steel as of 3/15/82. Cleveland-Cliffs as of 2/26/82, Oglebay Norton as of 3/25/82, and Hanna Mining as of 2/26/82.

Steel Production, Composite Prices

(Effective March 14, 1983)

U.S. Steel Production	Last Week	Two Weeks Ago	To Date 1983	To Date 1982
Net tons, in thousands	1,566	1,506	13,842	17,720
Capability Utilization Rate	54.0	52.0	47.1	59.3

Composite Prices	This Week	Week Ago	Month Ago	Year Ago
Finished Steel Base* (¢/lb.—eff. 2/14/83)	26.217	26.217	26.217	25.195
Pig Iron* * (Net ton=2000 lbs.)	$213.00	$213.00	$213.00	$213.00
Scrap No. 1 hvy.* * * (Gross ton=2240 lbs.)	$ 72.83	$ 73.83	$ 69.83	$ 81.83
No. 2 bundles	$ 51.83	$ 51.83	$ 47.83	$ 56.17
Scrap Comparison (Gross Ton)				
No. 1 steel, Pittsburgh	$ 77.50	$ 80.50	$ 74.50	$ 90.50
No. 1 steel, Philadelphia	63.50	63.50	63.50	75.50
No. 1 steel, Chicago	77.50	77.50	71.50	79.50
No. 1 bundles, Detroit	76.50	76.50	61.50	83.50
Low Phos., Youngstown	69.50	69.50	69.50	95.50
No. 1 mach'y cast., Pgh	79.50	79.50	66.50	93.50
No. 1 mach'y cast., Phila	98.50	98.50	98.50	113.50
No. 1 mach'y cast., Chi	112.50	112.50	109.50	124.50

*Finished Steel Composite
Weighted index of steel bars, shapes, plates, wire, rails, black pipe, hot and cold rolled sheets and strips.
**Pig Iron Composite
Based on average prices for basic and foundry pig iron at representative producing points within the U.S.
***Steel Scrap Composite
Average of No. 1 hvy. melting steel scrap and No. 2 bundles delivered to consumers at Pittsburgh, Philadelphia and Chicago.

Nonferrous Prices

(Effective March 14, 1983)
Prices obtained in trade based on representative tonnages per gross ton delivered to consumer unless otherwise stated.

Primary Metal Prices

(cents per lb.)	current price	last price	date of change
Aluminum	76.00 (Nom.)	76.00-80.00	1/4/82
Copper (C)	78.00	78.00-80.00	3/11/83
Lead	20.00-23.00	21.00-23.00	3/2/83
Magnesium Ingot	134.00	125.00	6/1/81
Nickel	329.00	350.00	11/25/81
Titanium Sponge	555.00-585.00	555.00	4/29/82
Zinc	38.00-40.00	40.00	3/1/83

ALUMINUM: 99.5%. COPPER (C) = cathode. LEAD: common grade. MAGNESIUM: 99.8% pig. Velasco, Tex. NICKEL: electro., Port Colborne, Canada. ZINC: high grade.

Antimony, American Laredo, Texas . $2.00
Beryllium-aluminum 5% Be, per lb. contained Be $201.00
Beryllium-copper, per lb. cont. Be $121.00
Beryllium 97% powder 200 ..... $166.00
Bismuth, ton lots ..... $1.25-$1.40
Cadmium, under one ton ..... $1.05-$1.15
Calcium, ton lots, crown $3.05
Chromium, 99.8% $3.75
Cobalt, 99%, cathode $12.50
Gold per troy oz. $428.50
Indium, dollars per troy oz. ..... $2.60-$2.85
Iridium, dollars per troy oz. $600
Magnesium sticks, 10,000 lbs. $1.91
Mercury, per 76-lb. f.o.b. N.Y. ..$330-$355
Molybdenum, lb. tech. moly oxides, 20 lb. MO can $5.85
Nickel oxide sinter at U.S. points of entry $3.12
Palladium, per troy oz. $140
Platinum, per troy oz. $475
Rhodium, per troy oz. $600.00
Silver ingots, per troy oz. $10.73
Vanadium $4.94
Zirconium sponge ..... $12.00-$17.00
(Per lb. unless otherwise noted)

Straits Tin Price

(U.S. cents per lb, EX-SMELTER, based on daily market in Penang in Malaysian dollars per kilo.)

Mar. 7—588.39
Mar. 8—593.33
Mar. 9—592.83
Mar. 10—594.57
Mar. 11—597.14

Scrap Prices

Brass Mill Scrap

(Cents per lb; over 20,000 lbs. add 1¢ per lb)

	Solids	Turning
Copper	77½	68¼
Yellow brass	65⅛	61¼
Red brass	70	67⅛
Comm. bronze	72⅝	67¾
Mang. bronze	63⅞	61⅝
Free cutting rod ends	61	60

Custom Smelters Scrap

(Cents per lb., carload lots, del. refinery)

No. 1 copper wire	69
No. 2 copper wire	59
Light copper	50

Ingot Makers Scrap

(Cents per lb., carload lots, del. refinery)

No. 1 copper wire	65
No. 2 copper wire	55
Light copper	46
No. 1 composition	53
No. 1 comp. turnings	49
Hvy. yellow brass solids	36
Hvy. yellow brass turnings	27
Radiators	43

Aluminum

New mixed clips	34	—35
Old sheet	32	—33
Old cast	32	—33
Clean dry borings	33	—34

Dealers' Scrap

(Dealers' buying price f.o.b. New York in cents per pound)

Aluminum

Segregated clippings	27	—28
Mixed L.C. clips	24	—25
Old sheets and cast	19	—20
Borings and turnings	13	—14
Duraluminum clippings	22	—23

Copper and Brass

No. 1 copper wire	56	—58
No. 2 copper wire	50	—51
Light copper	44	—45
Radiators	37	—38
No. 1 composition	45	—46
No. 1 composition turn'gs	42	—44
Cocks and faucets	32	—33
Clean heavy yellow brass	31	—32
Brass Pipe	31	—32
New soft brass clippings	46	—47

Lead

Heavy soft lead	10	—11
Whole batteries	4	— 5
Type metal	15	—16
Electrotype	17	—18

Nickel

Nickel solids	95	—100
Nickel rod ends	95	—100
Nickel sheets, clips	95	—100
Nickel turnings	45	— 50

Zinc

New zinc clippings	15	—16
Old diecast zinc	9	—10

EFFECTIVE MARCH 14, 1983

MATERIALS NEWSFRONT

(Effective March 14, 1983) Prices obtained in trade based on representative tonnages per gross ton delivered to consumer unless otherwise stated. Prices are the opinions of *Iron Age* editors and correspondents, based on contacts with dealers, brokers, generators and users in the industry on the effective date listed above.

Ferrous Scrap Prices

Pittsburgh

No. 1 hvy. melting	$ 77.00 to	$ 78.00
No. 2 hvy. melting	67.00 to	68.00
No. 1 dealer bundles	91.00 to	92.00
No. 1 factory bundles (auto)	91.00 to	92.00
No. 2 bundles	54.00 to	55.00
No. 1 busheling	91.00 to	92.00
Machine shop turn.	13.00 to	14.00
Shoveling turnings	34.00 to	35.00
Cast iron borings	33.00 to	34.00
Low phos. punchings plate	91.00 to	92.00
Heavy turnings	67.00 to	68.00
No. 1 RR hvy. melting	84.00 to	85.00
Rails 2 ft. and under	94.00 to	95.00
Scrap rails, random lgth.	87.50 to	88.50
RR specialties	83.00 to	84.00
No. 1 machinery cast	79.00 to	80.00
Cupola cast	72.00 to	73.00
Heavy breakable cast	30.00 to	31.00
Stainless		
18-8 bundles and solids	540.00 to	550.00
18-8 turnings	440.00 to	450.00

Chicago

No. 1 hvy. melting	$ 77.00 to	$ 78.00
No. 2 hvy. melting	66.00 to	67.00
No. 1 dealer bundles	87.00 to	88.00
No. 1 factory bundles (auto)	93.00 to	94.00
No. 2 dealer bundles	54.00 to	55.00
No. 1 busheling	84.00 to	85.00
Shredder scrap	80.00 to	81.00
Machine shop turn.	14.00 to	15.00
Mixed bor. and turn.	15.00 to	16.00
Shoveling turnings	19.00 to	20.00
Cast iron borings	41.00 to	42.00
Low phos. forge crop	92.00 to	93.00
Low phos. punchings plate ¼ in. and heavier	98.00 to	99.00
Low phos. 2 ft. and under	92.00 to	93.00
No. 1 RR hvy. melting	84.00 to	85.00
Scrap rails, random lgth.	76.00 to	77.00
Reroller rails	101.00 to	102.00
Rails, 2 ft. and under	97.00 to	98.00
RR couplers and knuckles	86.00 to	87.00
RR car axles	109.00 to	110.00
No. 1 machinery cast	112.00 to	113.00
Cupola cast	97.00 to	98.00
Stove plate	94.00 to	95.00
Steel car wheels	86.00 to	87.00
Stainless		
18-8 bundles and solids	515.00 to	525.00
18-8 turnings	415.00 to	425.00
430 bundles and solids	130.00 to	135.00
430 turnings	95.00 to	100.00

Philadelphia

No. 1 hvy. melting	$ 62.00 to	$ 65.00
No. 2 hvy. melting	54.00 to	57.00
No. 1 dealer bundles	79.00 to	82.00
No. 2 dealer bundles	45.00 to	48.00
No. 1 busheling	79.00 to	82.00
Shredder scrap	77.00 to	80.00
Machine shop turn.	23.00 to	26.00
Mixed bor. and turn.	23.00 to	26.00
Shoveling turnings	40.00 to	43.00
Low phos. 5 ft. and under	79.00 to	82.00
Low phos. 2 ft. punchings	91.00 to	94.00
Electric furnace bundles	95.00 to	98.00
RR specialties	79.00 to	82.00
Rails, 2 ft. and under	93.00 to	96.00
Cupola cast	60.00 to	63.00
Heavy breakable cast	53.00 to	56.00
No. 1 machinery cast	97.00 to	100.00

Detroit

Broker buying prices per gross ton on cars:

No. 1 hvy. melting	$ 52.00 to	$ 53.00
No. 2 hvy. melting	50.00 to	51.00
No. 1 dealer bundles	76.00 to	77.00
No. 2 bundles	32.00 to	33.00
No. 1 busheling	73.00 to	74.00
Drop forge flashings	47.00 to	48.00
Machine shop turn.	29.00 to	30.00
Mixed borings and turn.	14.00 to	15.00
Shoveling turnings	29.00 to	30.00
Cast iron borings	13.00 to	14.00
Heavy breakable cast	32.00 to	33.00
Mixed cupola cast	48.00 to	49.00
Automobile cast	69.00 to	70.00
Stainless		
18-8 bundles and solids	430.00 to	440.00
18-8 turnings	310.00 to	320.00
430 bundles and solids	120.00 to	130.00

Youngstown

No. 1 hvy. melting	$ 67.00 to	$ 68.00
No. 2 hvy. melting	59.00 to	60.00
No. 1 dealer bundles	79.00 to	80.00
No. 2 dealer bundles	39.00 to	40.00
Machine shop turn.	2.00 to	3.00
Shoveling turnings	7.00 to	8.00
Low phos. plate	69.00 to	70.00
Electric furnace bundles	75.00 to	76.00
Galvanized bundles	65.00 to	66.00

Cleveland

No. 1 hvy. melting	$ 69.00 to	$ 70.00
No. 2 hvy. melting	29.00 to	30.00
No. 1 dealer bundles	77.00 to	78.00
No. 1 factory bundles	89.00 to	90.00
No. 2 bundles	24.00 to	25.00
No. 1 busheling	77.00 to	78.00
Machine shop turn.	2.00 to	3.00
Mixed bor. and turn.	2.00 to	3.00
Shoveling turnings	5.00 to	6.00
Cast iron borings	5.00 to	6.00
Cut structural & plates, 2 ft. and under	95.00 to	96.00
Low phos. punchings plate	95.00 to	96.00
Drop forge flashings	33.00 to	34.00
Foundry steel, 2 ft. & under	59.00 to	60.00
No. 1 RR hvy melting	63.00 to	64.00
Rails, 2 ft. and under	99.00 to	100.00
Rails, 18 in. and under	100.00 to	101.00
Steel axle turnings	69.00 to	70.00
Railroad cast	82.00 to	83.00
No. 1 machinery cast	89.00 to	90.00
Cupola cast	62.00 to	63.00
Stove plate	47.00 to	48.00
Stainless		
18-8 bundles	275.00 to	285.00
18-8 turnings	225.00 to	235.00
430 bundles	75.00 to	85.00

Buffalo

No. 1 hvy. melting	$ 33.00 to	$ 34.00
No. 2 hvy. melting	23.00 to	24.00
No. 1 busheling	38.00 to	39.00
No. 1 dealer bundles	36.00 to	38.00
No. 2 bundles	20.00 to	21.00
Machine shop turn.	9.00 to	10.00
Mixed bor. and turn.	16.00 to	17.00
Shoveling turnings	18.00 to	19.00
Cast iron borings	15.00 to	16.00
Low phos. plate	56.00 to	57.00
Structural and plate, 2 ft. and under	54.00 to	55.00
Rails, 2 ft. and under	50.00 to	51.00
Scrap rails, random lgth.	30.00 to	31.00
No. 1 machinery cast	71.00 to	72.00
No. 1 cupola cast	48.00 to	49.00

St. Louis

No. 1 hvy. melting	$ 64.00 to	$ 65.00
No. 2 hvy. melting	53.00 to	54.00
Foundry steel, 2 ft.	53.00 to	54.00
No. 1 dealer bundles	64.00 to	65.00
No. 2 bundles	50.00 to	51.00
Machine shop turn.	12.00 to	13.00
Shoveling turnings	18.00 to	19.00
Cast iron borings	30.00 to	31.00
No. 1 RR hvy. melting	64.00 to	65.00
Rails, random length	61.00 to	62.00
Rails, 18 in. and under	76.00 to	77.00
RR specialties	80.00 to	81.00
Cupola cast	70.00 to	71.00
Heavy breakable cast	48.00 to	49.00
Stove plate	82.00 to	83.00
Cast iron car wheels	49.00 to	50.00
Rerolling rails	96.00 to	97.00
Unstripped motor blocks	55.00 to	56.00

Birmingham

No. 1 heavy melting	$ 58.00 to	$ 59.00
No. 2 heavy melting	56.00 to	57.00
No. 1 dealer bundles	58.00 to	59.00
No. 2 bundles	43.00 to	44.00
No. 1 busheling	58.00 to	59.00
Shredder scrap	73.00 to	74.00
Machine shop. turn.	21.00 to	22.00
Shoveling turnings	31.00 to	32.00
Cast iron borings	31.00 to	32.00
Electric furnace bundles	58.00 to	59.00
Elec. furnace, 3 ft. & under	56.00 to	57.00
Structural and plate, 2 ft.	75.00 to	76.00
Structural and plate, 4 ft.	71.00 to	72.00
No. 1 RR hvy. melting	59.00 to	60.00
Scrap rails, random lgth.	60.00 to	61.00
Rails, 18 in. and under	78.00 to	79.00
Angles and splice bars	73.00 to	74.00
No. 1 cupola cast	76.00 to	77.00
Unstripped motor blocks	52.00 to	53.00

Cincinnati

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 53.00 to	$ 54.00
No. 2 hvy. melting	52.00 to	53.00
No. 1 dealer bundles	59.00 to	60.00
No. 2 bundles	30.00 to	31.00
Machine shop turn.	6.00 to	7.00
Shoveling turnings	10.00 to	11.00
Cast iron borings	11.00 to	12.00
Low phos. 18 in. and under	78.00 to	79.00
Rails, random length	60.00 to	61.00
Rails, 2 ft. and under	82.00 to	83.00
No. 1 cupola cast	65.00 to	66.00
Heavy breakable cast	29.00 to	30.00
Drop broken cast	69.00 to	70.00

New York

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 34.00 to	$ 35.00
No. 2 hvy. melting	30.00 to	32.00
No. 2 dealer bundles	22.00 to	23.00
Mixed bor. and turn.	7.00 to	8.00
Machine shop turn.	4.00 to	5.00
Shoveling turnings	10.00 to	12.00
Clean cast. chem. borings	34.00 to	35.00
No. 1 machinery cast	89.00 to	90.00
Mixed yard cast	38.00 to	39.00
Heavy breakable cast	14.00 to	15.00
Stainless		
18-8 prepared solids	455.00 to	475.00
18-8 turnings	340.00 to	365.00
430 prepared solids	70.00 to	80.00
410 solids	60.00 to	70.00

Boston

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 38.00 to	$ 40.00
No. 2 hvy. melting	28.00 to	30.00
No. 1 dealer bundles	40.00 to	42.00
No. 2 bundles	29.00 to	31.00
No. 1 busheling	40.00 to	42.00
Shredder scrap	43.00 to	45.00
Machine shop turn.	3.00 to	5.00
Shoveling turnings	7.00 to	9.00
No. 1 machinery cast	105.00 to	110.00
Mixed cupola cast	28.00 to	30.00
Heavy breakable cast	8.00 to	10.00

San Francisco

No. 1 hvy. melting	$ 39.00 to	$ 41.00
No. 2 hvy. melting	31.00 to	33.00
No. 1 dealer bundles	26.00 to	28.00
No. 2 dealer bundles	11.00 to	13.00
Machine shop turn.	4.00 to	6.00
Cast iron borings	4.00 to	6.00
No. 1 cupola cast	83.00 to	85.00

Los Angeles

No. 1 hvy. melting	$ 38.00 to	$ 40.00
No. 2 hvy. melting	27.00 to	29.00
No. 1 dealer bundles	25.00 to	27.00
No. 2 dealer bundles	8.00 to	10.00
Machine shop turn.	4.00 to	6.00
Shoveling turnings	8.00 to	10.00
Cast iron borings	4.00 to	6.00
Elec. furnace, 1 ft. and under (foundry)	84.00 to	86.00
No. 1 cupola cast	86.00 to	88.00

Seattle

No. 1 hvy. melting	$ 55.00 to	$ 57.00
No. 2 hvy. melting	44.00 to	46.00
No. 2 bundles	33.00 to	35.00
No. 1 cupola cast	90.00 to	92.00
Mixed yard cast	78.00 to	80.00

Hamilton, Ont.

Brokers buying price per net ton on cars:

No. 1 heavy melting	$ 43.00
No. 2 heavy melting cut 2 ft. and under	40.00
No. 1 dealer bundles	50.00
No. 2 bundles	20.00
Mixed steel scrap	24.00
Bush. new fact. prep'd.	48.00
Bush. new fact. unprp'd.	40.00
Machine shop turn.	23.00
Short steel turn.	26.00
Mixed bor. and turn.	15.00
Cast scrap	40.00

Houston

Brokers buying prices per gross ton on cars:

No. 1 hvy. melting	$ 64.00 to	$ 65.00
No. 2 hvy. melting	49.00 to	50.00
No. 2 bundles	34.00 to	36.00
Machine shop turn.	18.00 to	19.00
Crushed turnings	33.00 to	35.00
Shredder scrap	64.00 to	65.00
Cut structural plate 2 ft. and under	84.00 to	86.00
Unstripped motor blocks	60.00 to	62.00
Cupola cast	69.00 to	71.00